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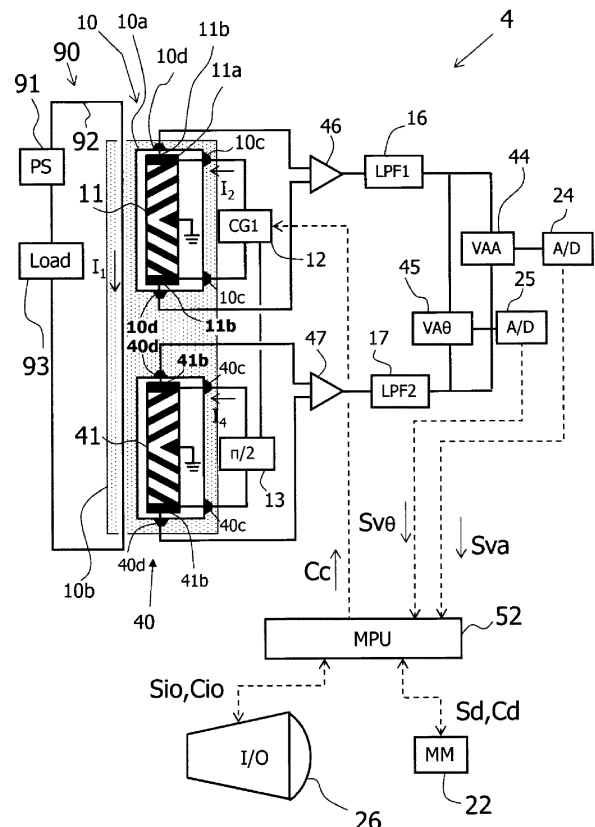
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(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
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(54) **ELECTRIC CURRENT MEASUREMENT APPARATUS**

(57) Disclosed is an electric current measurement apparatus to measure a current flowing in a wire. The electric current measurement apparatus comprises a first magnetic element; a second magnetic element; a first current source capable of supplying a first alternating current to the first magnetic element; a second current source capable of supplying a second alternating current to the second magnetic element, a phase of the second alternating current being deviated from a phase of the first alternating current; a first lowpass filter configured to pass a low frequency component of an output from the first magnetic element; and a second low pass filter configured to pass a low frequency component of an output from the second magnetic element. The electric current measurement apparatus also comprises an operator configured to calculate a square root of a sum of squares of an output from the first low pass filter and an output from the second low pass filter, and / or an arc tangent value of the output from the first low pass filter and the output from the second low pass filter.

FIG.14





EUROPEAN SEARCH REPORT

Application Number
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 4 December 2017	Examiner Agerbaek, Thomas
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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ANNEX TO THE EUROPEAN SEARCH REPORT
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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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